## Product data sheet

Specifications





# Control relay, TeSys K, 3 NO + 1 NC, It or eq to 690V, 24VAC coil

CA2KN31B72

() Discontinued on: Jul 12, 2021

#### () Discontinued

#### Main

Range	TeSys
Product Name	TeSys CAK
Product Or Component Type	Control relay
Device Short Name	CA2K
Contactor Application	Control circuit
Utilisation Category	AC-15 DC-13
Pole Contact Composition	3 NO + 1 NC
[Ue] Rated Operational Voltage	<= 690 V <= 400 Hz
Control Circuit Type	AC 50/60 Hz
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz

#### Complementary

[Ith] Conventional Free Air   10 A (at 122 °F (50 °C))     Irms Rated Making Capacity   110 A IEC 60947     Associated Fuse Rating   10 A gG conforming to IEC 60947     10 A gG conforming to VDE 0660   [Ui] Rated Insulation Voltage     690 V IEC 60947   750 V VDE 0110 group C     750 V VDE 0110 group C   690 V IEC 60947     750 V VDE 0110 group C   690 V IEC 60947     750 V VDE 0110 group C   690 V IES 5424     600 V CSA C22.2 No 14   600 V CSA C22.2 No 14     Mounting Support   Rail     Plate   Screw clamp terminals 1 0.000.01 in² (1.54 mm²)solid     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.00 in² (0.341.5 mm²)flexible with cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²	· · · · · · · · · · · · · · · · · · ·	
Thermal Current   If the form of t	Coil Technology	Built-in bidirectional peak limiting diode suppressor
Associated Fuse Rating   10 A gG conforming to IEC 60947 10 A gG conforming to VDE 0660     [Ui] Rated Insulation Voltage   690 V IEC 60947 750 V VDE 0110 group C 690 V BS 5424 600 V CSA C22.2 No 14     Mounting Support   Rail Plate     Connections - Terminals   screw clamp terminals 1 0.000.01 in² (1.54 mm²)solid screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end screw clamp terminals 1 0.000.01 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.00000 in² (0.341.5 m²)flexible without cable end		10 A (at 122 °F (50 °C))
10 A gG conforming to VDE 0660     [Ui] Rated Insulation Voltage     690 V IEC 60947     750 V VDE 0110 group C     690 V BS 5424     600 V CSA C22.2 No 14     Mounting Support     Rail     Plate     Connections - Terminals     screw clamp terminals 1 0.000.01 in² (1.54 mm²)solid     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.00 in² (0.341.5 mm²)flexible with cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 1.15 lbf.in (1.3 N.m) screw clamp terminals flat Ø 6 mm     11.51 lbf.in (1.3 N.m) screw clamp terminals Philips No 2 0.24 in (6 mm)     Control Circuit Voltage Limits   Drop-out: 0.20.75 Uc (at <122 °F (50 °C))	Irms Rated Making Capacity	110 A IEC 60947
750 V VDE 0110 group C     690 V BS 5424     600 V CSA C22.2 No 14     Mounting Support     Rail     Plate     Connections - Terminals     screw clamp terminals 1 0.000.01 in² (1.54 mm²)solid     screw clamp terminals 2 0.000.01 in² (0.754 mm²)solid     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible without cable end     screw clamp terminals 2 0.000.01 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end		
Plate   Connections - Terminals screw clamp terminals 1 0.000.01 in² (1.54 mm²)solid screw clamp terminals 2 0.000.01 in² (1.54 mm²)flexible with cable end screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with out cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible with out cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.000 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.0000 in² (0.341.5 mm²)flexible without cable end screw clamp terminals 2 0.0000 in² (0.341.5 mm²)flexible without cable end screw cl	[Ui] Rated Insulation Voltage	750 V VDE 0110 group C 690 V BS 5424
Solor of baling formulate 1 0.00.101 in² (1.54 mm²)solid     screw clamp terminals 1 0.000.01 in² (1.54 mm²)flexible with cable end     screw clamp terminals 2 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible with cable end     screw clamp terminals 1 0.000.01 in² (0.754 mm²)flexible without cable end     screw clamp terminals 1 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 2 0.000.00 in² (0.341.5 mm²)flexible without cable end     screw clamp terminals 1.1.5 Uc (at <122 °F (50 °C))	Mounting Support	
11.51 lbf.in (1.3 N.m) screw clamp terminals Philips No 2 0.24 in (6 mm)     Control Circuit Voltage Limits   Drop-out: 0.20.75 Uc (at <122 °F (50 °C)) Operational: 0.81.15 Uc (at <122 °F (50 °C))	Connections - Terminals	screw clamp terminals 2 0.000.01 in <sup>2</sup> (1.54 mm <sup>2</sup> )solid screw clamp terminals 1 0.000.01 in <sup>2</sup> (0.754 mm <sup>2</sup> )flexible with cable end screw clamp terminals 2 0.000.01 in <sup>2</sup> (0.754 mm <sup>2</sup> )flexible without cable end
Operational: 0.81.15 Uc (at <122 °F (50 °C))       Operating Time     1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing 1525 ms coil de-energisation and NC closing	Tightening Torque	
1020 ms coil energisation and NO closing 1525 ms coil de-energisation and NC closing	Control Circuit Voltage Limits	
	Operating Time	1020 ms coil energisation and NO closing 1525 ms coil de-energisation and NC closing

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Mechanical Durability	10 Mcycles
Maximum Operating Rate	10000 cyc/h
Immunity To Microbreaks	2 ms
Inrush Power In Va	30 VA (at 68 °F (20 °C))
Hold-In Power Consumption In Va	4.5 VA (at 68 °F (20 °C))
Heat Dissipation	1.3 W
Minimum Switching Voltage	17 V
Minimum Switching Current	5 mA
Non Overlap Distance	0.02 in (0.5 mm)
Insulation Resistance	> 10 MOhm
Height	2.28 in (58 mm)
Width	1.77 in (45 mm)
Depth	2.24 in (57 mm)
Net Weight	0.40 lb(US) (0.18 kg)

#### Environment

Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product Certifications	CB Scheme CCC UL CSA EAC CE UKCA
Ip Degree Of Protection	IP2X
Protective Treatment	TC IEC 60068
Ambient Air Temperature For Operation	-13122 °F (-2550 °C)
Ambient Air Temperature For Storage	-58176 °F (-5080 °C)
Operating Altitude	6561.68 ft (2000 m) without derating
Flame Retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical Robustness	Vibrations contactor open2 Gn, 5300 Hz IEC 60068-2-6 Vibrations contactor closed4 Gn, 5300 Hz IEC 60068-2-6 Shocks contactor open10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed15 Gn for 11 ms IEC 60068-2-27

## Ordering and shipping details

Category	22371-RELAYS, CONTROL
Discount Schedule	112
Gtin	3389110481907
Returnability	No
Country Of Origin	FR

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.56 in (6.5 cm)
Package 1 Width	2.36 in (6 cm)
Package 1 Length	1.89 in (4.8 cm)
Package 1 Weight	6.49 oz (184 g)

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Reach Free Of Svhc

Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes

### **Certifications & Standards**

Eu Rohs Directive	Compliant
	EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov